

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027737**Date Inspected:** 10-Jun-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job site**CWI Name:** As Noted Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG/Tower**Summary of Items Observed:**

Quality Assurance Inspector (QA) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

**OBG (13E Deck drop in)**

The QA inspector periodically observed ABF/JV qualified welder Richard Garcia #5892 performing Shielded Metal Arc Welding (SMAW) in the 4G position implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D1.5-1030. The joint being welded was the floor beam flange splice at panel point 124 and is designated as 13E-PP124.5-E2.8-BF1. The repair surface and surrounding area was brought to temperature the use of a gas torch and the preheat temperature was confirmed by ABF Quality Control (QC) prior to welding. The Quality Control (QC) inspector Salvador Merino was noted monitoring the welding parameters at the beginning of the shift.

This QA inspector observed ABF/JV personnel performing the final overhead grinding operations of the lift 13 East deck weld reinforcement west of panel point 122 that was welded on an earlier shift. The QC inspector Salvador Merino was present in order to monitor the progression of work inspecting the grinding at the weld toe to ensure sufficient blending prior to final UT and MT inspection.

This QA inspector noted and periodically observed ABF/JV qualified welder Khit Lounchaney #4985 performing Shielded Metal Arc Welding (SMAW) in the 1G position implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D1.5-1030. The joint being welded was the floor beam flange splice at panel

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point 124 and is designated as 13E-PP123-E21-BF1. The repair surface and surrounding area was brought to temperature the use of a gas torch and the preheat temperature was confirmed by ABF Quality Control (QC) prior to welding. The Quality Control (QC) inspector Salvador Merino was noted monitoring the welding parameters at the beginning of the shift.

The QA inspector periodically observed ABF/JV qualified welder Steve Davis #7889 performing Shielded Metal Arc Welding (SMAW) in the 4G position implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D1.5-1030. The joint being welded was the floor beam flange splice at panel point 123 and is designated as 13E-PP123-BF1. The repair surface and surrounding area was brought to temperature the use of a gas torch and the preheat temperature was confirmed by ABF Quality Control (QC) personnel prior to welding. The Quality Control (QC) inspector Salvador Merino was noted monitoring the welding parameters at the beginning of the shift.

### OBG (13E Deck drop in repairs)

This QA inspector randomly observed ABF welding personnel performing weld excavations in areas previously rejected by UT, on the Complete Joint Penetration (CJP) deck drop-in splice weld 13E-E2.2 at Y location 4230~4620. It was observed that ABF personnel disregarded the required preheat prior to excavation for the repair of the (SPCM) material. The weld was excavated to a depth of 15mm. The welding personnel then proceeded to weld the excavation that was greater than 65% of the weld size, without the prior approval of the engineer. The QA inspector generated an incident report on this date.

### Ultrasonic Testing (OBG Deck Lift 13/14 East)

This QA performed 30% Ultrasonic Testing (UT) on Complete Joint Penetration (CJP) deck drop-in splice welds at lift 13E/14E. This weld was previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications. The weld is designated as 13/14E-A1 from Y location 0~1800. The location of verification was performed between Y= 900~1440.

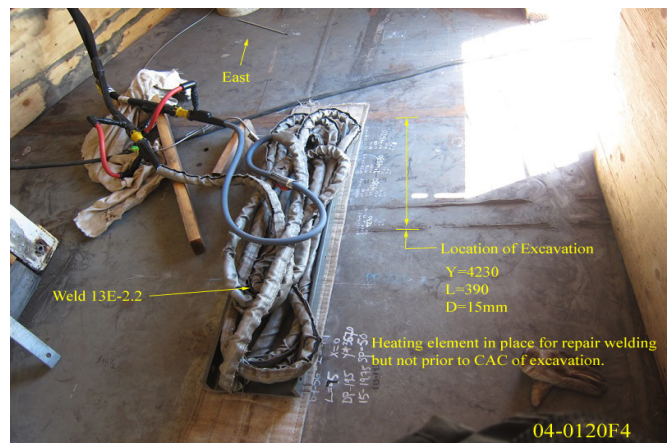
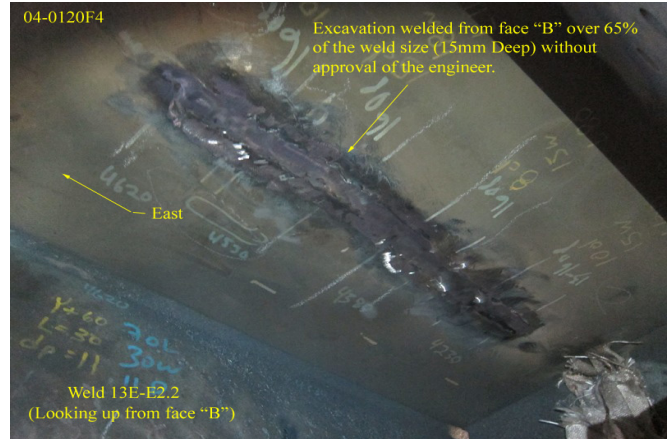
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

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## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

**Inspected By:** Patterson,Rodney

Quality Assurance Inspector

**Reviewed By:** Levell,Bill

QA Reviewer